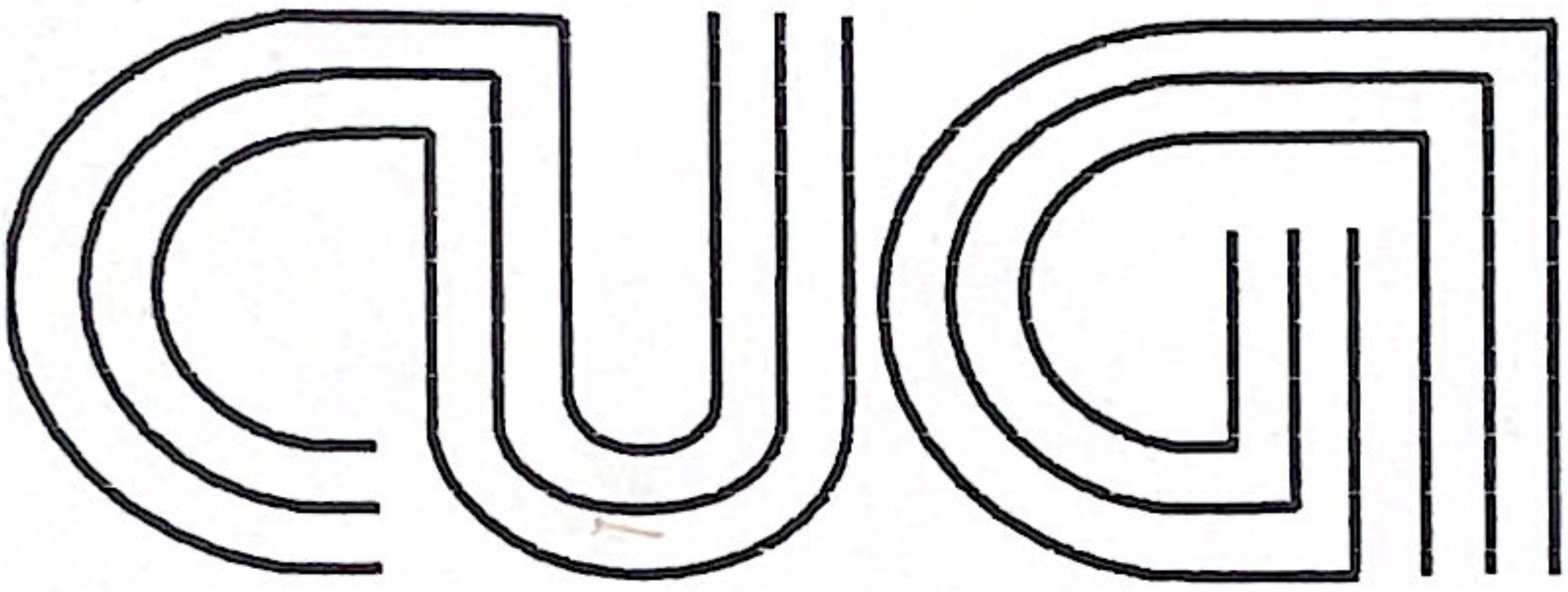

Newsletter

January 1993

In this issue...

- *Calling Intuition from ARexx*
- *A Computer Murder Mystery*
- *Mixing C and Assembler*
- *Computers on Teletext*
- *CUGI's BBS*

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January 1993

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Editorial

Welcome to the January issue of the newsletter, and a happy new year to all our members, new and old. One of my new year's resolutions is to get the newsletter out in the same month that's printed on the cover—one down, three to go! We have a nice spread of articles, covering ARexx, C & Assembly, along with the more regular contributions. Thanks as always to everyone who contributed. Although I had planned to review *SAS/C 6.0*, I've had to postpone it until the April newsletter, due to time constraints. For now, I'll just say that it is well worth the upgrade price of £75.

Since the last issue, we have of course had the AGM, which has resulted in a few changes to the committee. Brian, Tom and Declan have stepped down and their shoes are now being ably filled by Dave Harrison, Jamie Ruane, and Magnus Byne. Welcome to all three of you.

CBM US Powers Up Again

Compared to the abundance of exciting news I was able to report in the October issue of the newsletter, things have been fairly quiet over the past few months. The Amiga 1200 was officially launched in the USA in November, and was well received. In addition, from 1 January 1993, Commodore US are offering a power-up promotion which lets you buy an Amiga 4000/120 for $2695, including copies of *DeluxePaint IV AGA* and *Art Department Professional*. Even without the software, this is about $1000 cheaper than the launch price. The Amiga 1200 is available under the same promotion for $599, including *DeluxePaint IV AGA* and *Final Copy 1.3*. Unlike earlier power-up programs, you don't even need to be an existing Amiga owner to avail of these offers.

In the UK and Ireland, no such deals have been offered. Since the A1200 seems to be selling very well without any extra incentives, this isn't surprising. In Ireland, the current Amiga prices are running at £350 for an Amiga 600, or £449 for an Amiga 1200; compared to even 12 months ago, these are pretty cheap!

Speaking of prices, let me take this opportunity to give MicroMail in Cork a free plug. They're currently discounting all their book prices by 10% because of the Sterling situation. As always, their service remains exemplary, with next-morning delivery guaranteed. You can ring them on 021 317 686 for a current catalogue.

Amiga 4000 Woes

In my review of the Amiga 4000 last issue, I mentioned that my unit had packed up after two weeks and was awaiting replacement. Well, I'm happy to report that I didn't have to wait as long as Tommy Gibbons did for his A1500; about 6 weeks after the original unit stopped working, I had my replacement. (I still have my original faulty unit as well, since Commodore haven't got around to picking it up yet!)

So why did my A4000 pack up in the first place? As far as I can determine, my unit (one of the first off the production line) was shipped with the fan installed the wrong way around, resulting in it sucking cold air into the machine instead of blowing it out. Since the air being sucked in got to travel past the nice warm power supply, it had warmed by the time it reached the 68040 and associated circuitry, and so didn't have as much of a cooling effect as it should have. Since I leave all my equipment on 24 hours/day, eventually the heat buildup reached a critical point, and something blew. The replacement machine has the fan installed correctly.

Where Did Those Sprites Go?

Here's a tip for all you new A1200 and A4000 owners using a DBL_PAL Workbench (to avoid flicker). You might notice that some programs which use sprites (such as terminal programs, PC emulators, and other applications that have flashing cursors) no longer seem to work properly—the cursors are invisible. There's an easy work around though: go into the overscan editor, and set the graphics overscan region for DBL_PAL to the maximum size available. Now edit the graphics overscan for normal PAL and set it to exactly the same horizontal size as you did for DBL_PAL (i.e. 676 pixels). Save the changes.

Now, when you next load your misbehaving program, use Left-Amiga/Left-Mouse to drag the program screen to the right edge of the screen. Type a character or two and you should see your cursor reappearing.

Graphics Galore

There are now no fewer than three graphics boards from Germany, all based on the idea of taking cheap modern VGA technology and making it available to Amiga users. These cards plug into a standard Zorro II slot and offer resolutions up to 1280 × 1024 with up to 256 colours (24-bit in some resolutions). Software support to allow Workbench to run on the new screens is also included.

The first two boards, the Domino (DM 698) and Merlin (DM 600 to DM 850) are from X-Pert Computer Services (+49 6126 8809/3056). Both boards offer high resolutions, but the newer Merlin will support up to 1280 × 1024 in 24-bit resolution. and also features a hardware accelerator to speed up blitting. X-Pert claim that the Merlin will feature auto-bus recognition so that it can operate at up to 20 Mb/second when placed in a Zorro III slot (as opposed to the 3.5 Mb/second you get under Zorro II). Merlin can also support an add-on realtime 24-bit digitiser with picture-in-picture facility (i.e. watch TV in a window on your 72 Hz Workbench display), as well as a digital 24-bit genlock. These extra options are DM 600 each, or DM 800 for the pair.

The other board is the oMniBus, available from ArMax (+49 7157 62481) for DM 598. Unlike the first two, which are single-card solutions, the oMniBus comprises two cards: a Zorro II dumb-bridgeboard which links the Amiga to the PC slots, and an ET4000-Hicolor SVGA PC card. A nice feature is that the Zorro II card includes a software video switcher which allows the video to be intelligently switched between the oMniBus and native Amiga video output, depending on what programs are running. If you have a Commodore bridgeboard with a VGA card, you'll appreciate how much cable-swapping this can save!

Given the current exchange rate (about IR£1 = DM 2.65) you'll appreciate just how reasonably these cards are priced (roughly £230!). Given that they all offer Workbench support, which can only get even better once Commodore release their ReTargetable Graphics spec (RTG), it looks like Amiga 1500/2000 and 3000 owners who were feeling a bit left out in the cold with the advent of the AGA machines will find their machines useful for quite some time to come. And even those of us with A4000's will be casting a careful eye in the direction of these boards, since they offer screen resolutions and refresh rates noticeably superior to AGA.

Florida Fun

As you may have heard, the 1993 Amiga Developers Conference is taking place in Orlando, Florida on 26–30 January. I'm reluctantly attending so that I can bring you a full report in the next newsletter (what an editor has to do sometimes... :-)

For the first time, the European and American Devcons have been rolled into a single inter-continental event, and it promises to be well worth attending. And since it would be a terrible waste to only go for the five days of the conference itself, I'll be spending a second week in Orlando to, ahem, recover. So, tune in next issue for full details (those that aren't restricted by Commodore's non-disclosure agreement anyway).

The deadline for articles for the next newsletter is March 19, so now is the time to get writing!

E.C.

CUGI's BBS

by James Ruane

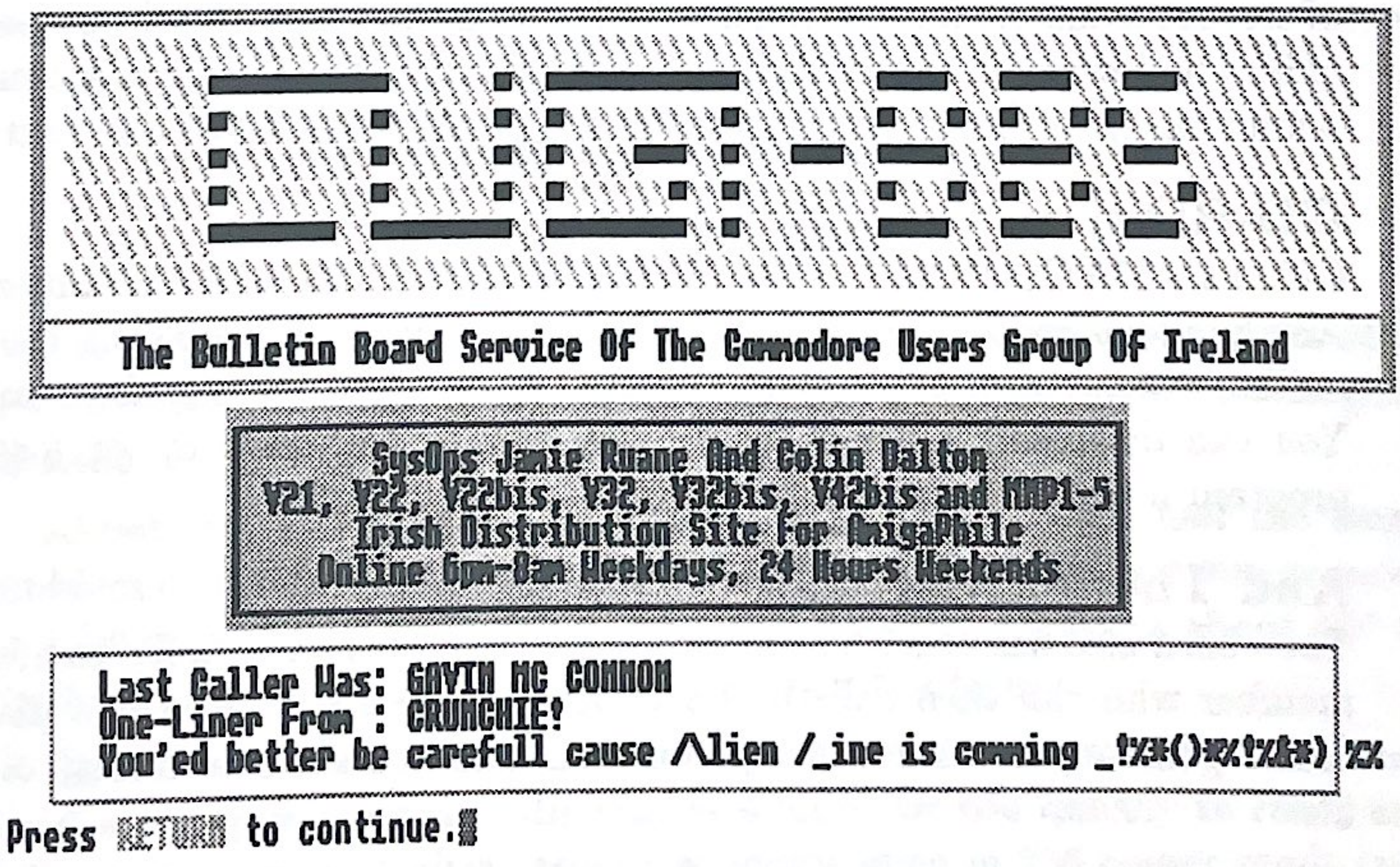
As you may know, CUGI has recently established a Bulletin Board Service. The service, called CUGI-BBS, aims to provide CUGI members with an easy method of communication outside of meetings. Hopefully it will aid communications between members and the committee.

A Quick Tour

The best way of explaining CUGI-BBS is through a quick 'tour' of the BBS's features and options. After logging in, you have to join the board. This is easily accomplished using the *Join* option on the main menu. Then, after about a day, your membership will be validated and you will have full access to the BBS. This allows you to use all the functions below.

Messages

CUGI-BBS has a large number of message areas. Three of these are CUGI-only. This allows members to discuss things that mightn't be of interest to others. There are also message areas for the usual subjects, including programming, the Amiga, and general chatter. Privileged messages are also supported. This is a great way to get in contact with other members.



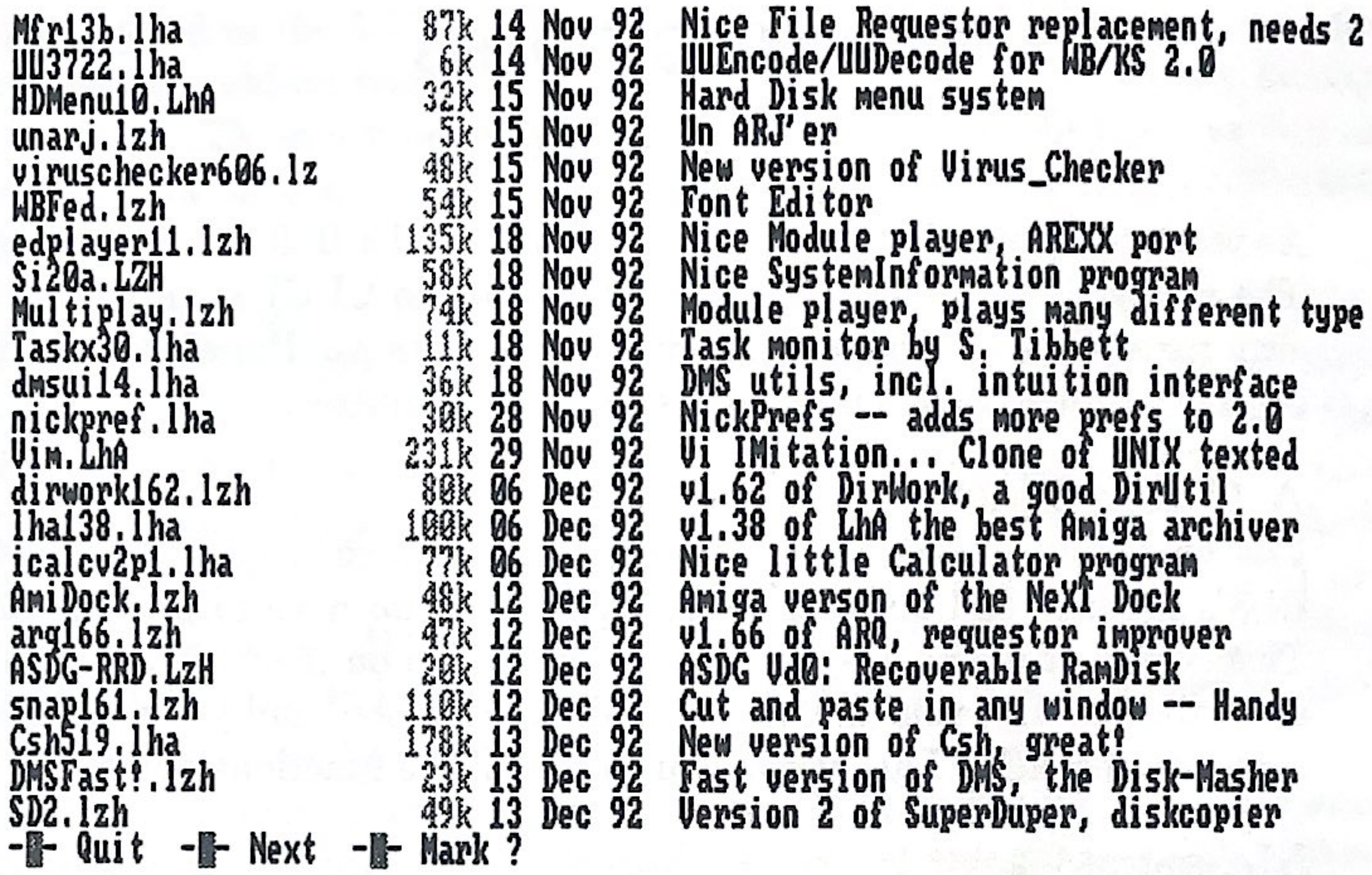
```
The Bulletin Board Service Of The Commodore Users Group Of Ireland

SysOps Jamie Ruane And Colin Dalton
V21, V22, V22bis, V32, V32bis, V42bis and MNP1-5
Irish Distribution Site For AmigaPhile
Online 6pm-8am Weekdays, 24 Hours Weekends

Last Caller Was: GAVIN MC COMMON
One-Liner From : CRUNCHIE!
You'ed better be carefull cause /\lien /_ine is comming _!%*()*%!%&*) %%

Press RETURN to continue.
```

This sight greets every user when they login



```
Mfr13b.lha              87k 14 Nov 92  Nice File Requestor replacement, needs 2
UU3722.lha               6k 14 Nov 92  UUEncode/UUDecode for WB/KS 2.0
HDMenu10.LhA            32k 15 Nov 92  Hard Disk menu system
unarj.lzh                5k 15 Nov 92  Un ARJ'er
viruschecker606.lz      48k 15 Nov 92  New version of Virus_Checker
WBFed.lzh               54k 15 Nov 92  Font Editor
edplayer11.lzh         135k 18 Nov 92  Nice Module player, AREXX port
Si20a.LZH               58k 18 Nov 92  Nice SystemInformation program
Multiplay.lzh           74k 18 Nov 92  Module player, plays many different type
Taskx30.lha             11k 18 Nov 92  Task monitor by S. Tibbett
dmsui14.lha             36k 18 Nov 92  DMS utils, incl. intuition interface
nickpref.lha            30k 28 Nov 92  NickPrefs -- adds more prefs to 2.0
Vim.LhA                231k 29 Nov 92  Vi IMitation... Clone of UNIX texted
dirwork162.lzh          80k 06 Dec 92  v1.62 of DirWork, a good DirUtil
lha138.lha             100k 06 Dec 92  v1.38 of LhA the best Amiga archiver
icalcv2p1.lha           77k 06 Dec 92  Nice little Calculator program
AmiDock.lzh             48k 12 Dec 92  Amiga verson of the NeXT Dock
arq166.lzh              47k 12 Dec 92  v1.66 of ARQ, requestor improver
ASDG-RRD.LzH            20k 12 Dec 92  ASDG Vd0: Recoverable RamDisk
snap161.lzh            110k 12 Dec 92  Cut and paste in any window -- Handy
Csh519.lha             178k 13 Dec 92  New version of Csh, great!
DMSFast!.lzh            23k 13 Dec 92  Fast version of DMS, the Disk-Masher
SD2.lzh                 49k 13 Dec 92  Version 2 of SuperDuper, diskcopier
-█- Quit  -█- Next  -█- Mark ?
```

Many files are available for downloading from CUGIBBS

Files

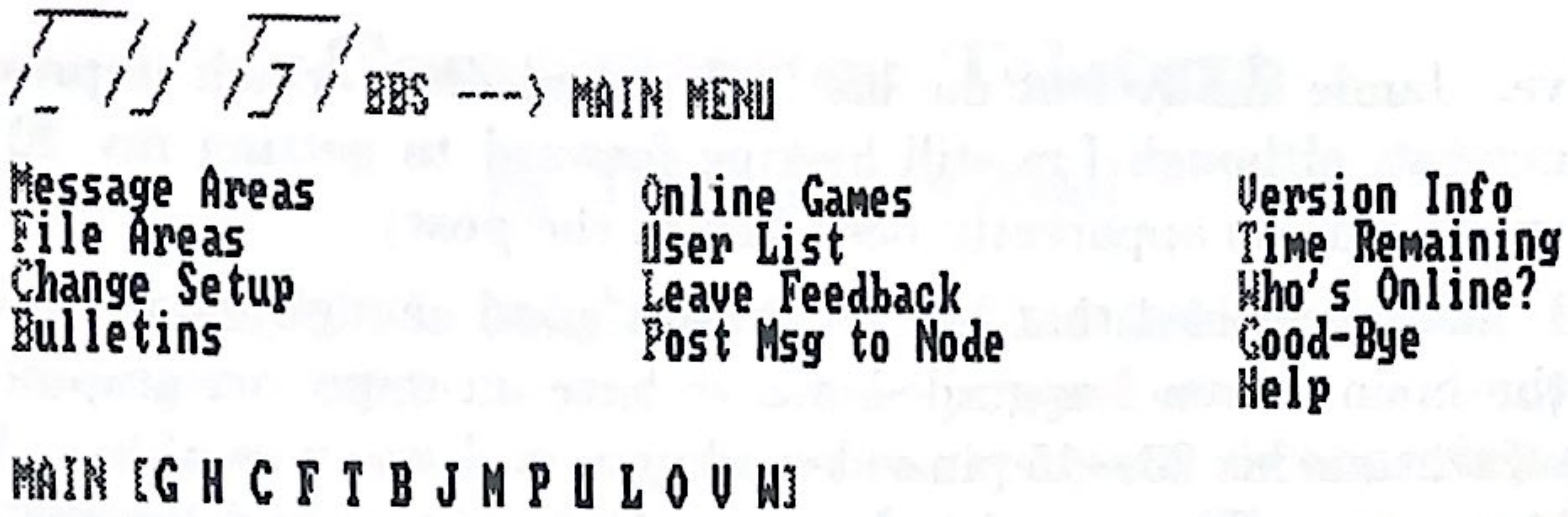
The butter of the BBS world's bread, files are generally one of the main reasons people call a BBS. On that score, CUGI-BBS has over thirty megabytes of storage available for file transfers. Although there is currently a shortage of files to download, that will change quite shortly. The file areas are mainly Amiga based, although there are areas for graphics (i.e. GIF) and text files.

CD-ROM

CUGI's A570 CD-ROM has been put online for the use of the membership. Any modem-equipped member can call the board and avail of the disc online, which currently contains the Fred Fish library from disks 1 to 660! You can download a whole disk if you have a fast modem, or just one program if you prefer.

And There's More...

The board also has other features. It is possible to transfer a file to another member who can then call the board and download it. You can play an online game against five other people. Also available are a variety of text files.



```
BBS ---> MAIN MENU

Message Areas          Online Games           Version Info
File Areas             User List              Time Remaining
Change Setup           Leave Feedback         Who's Online?
Bulletins              Post Msg to Node       Good-Bye
                                              Help

MAIN [G H C F T B J M P U L O V W]
```

Central Station of any BBS: The Main Menu

But I Haven't Got a Modem!

We're currently arranging a communications 'starter-pack' which you can borrow for a fortnight at a nominal fee. This will contain a 2400 bps modem, cable, and suitable communications software—everything you need to get online. If you're interested in exploring the world of bulletin boards but aren't quite ready to go out and buy a modem, this is an ideal way of getting your feet wet.

So, How Do I Call It?

The BBS is online from 6 pm to 9 am, Monday to Friday and 24 hours on weekends. It supports all speeds up to V32bis (14,400 bps). Give it a call sometime on Dublin 283 2829.

Upgrading to the Amiga 1200

by Magnus Byne

An ad for my A600-HD appeared in the *Evening Herald* just days after hearing that the A1200 was available through CUGI. In a week it was gone and the new machine was on order.

About two weeks before Christmas, it arrived. I then had the small problem of not having a display. I had lost my colour TV and was reduced to a black and white television (with the picture inclined at about 15° to the horizontal, from an earlier attempt to fix the focus).

Once I had the machine connected to the TV and turned it on, I noticed a *big* speed increase; directories scrolled by too quickly to read, and I didn't have to wait after resizing windows, even in 256 colour mode (not very effective in black and white). The main problem was disk changing; Workbench now comes on *five* floppy disks, so it's very painful with only one drive. Jamie kindly lent me his Power dual drive which improved things somewhat, although I'm still looking forward to getting my 20 Mb hard drive (which has apparently been lost in the post).

I quickly realised that the TV wasn't good enough for my new A1200, as the main reason I upgraded was to have an improved graphics display. Geoff lent me his 23→15 pin video adapter so I was now able to hook up a VGA monitor. The next day, I went to CompuStore and bought an SVGA LR monitor. Then came the hellish task of making a boot disk to use VGA mode. After some messing about and a few worrying moments (the manuals aren't too clear) I had Workbench running in crystal clear, sharp 676 by 574 resolution (overscanned DBL_PAL). This was breathtaking for me as I've always used a TV before and the definition was amazing.

I have now settled on a 16 colour Workbench with the Leaves backdrop from *Microsoft Windows 3.1*! In this mode, the machine runs noticeably slower than in 15 kHz (TV/1084) modes. However, fast memory should alleviate this a little bit and anyway it's well worth it.

On the issue of compatibility, the A1200 seems to be as, if not more, compatible than the A500+/A600. I find a lot of old demos which crashed on the A500+/A600 now work. This is because you can revert to the original chipset and disable the CPU cache from the new improved boot menu. I haven't tried many games, but the ones I have seem to work. Of course the problem with games is that very few of them support screen promotion (i.e. work on a VGA monitor) and switching back to the TV is off-putting. Exceptions to this are Workbench games such as *SimCity*.

On the downside is the fact that there is no clock, which is very annoying to a programmer. Much worse is the problem with the sound. The sound level is far too high, and causes a lot of distortion. I have remedied this by putting 33 ohm resistors in series with the amp, and this has almost fixed the problem. The A1200 seems to have suffered a lot of quality control problems; out of the five I know of, two had to be sent back and two more have sound problems.

So was it worth all the hassle? Well, I'm an old hand at changing machines, having had an A500, A500+, A600HD and now an A1200. However, this is the most significant upgrade so far. With a new and faster processor and whiz-bang graphics, its a big improvement and well worth it, provided you can get rid of your old A500!

Computers on Teletext

by Aidan Hollinshead

With the resurgence in popularity of computers and consoles in the past year, the various teletext companies have jumped on the bandwagon and either added new sections or improved those computer sections they already had. This being the start of a new year and the start of a new teletext service on ITV, and given the vast increase in popularity of teletext equipped televisions on the market, I decided I'd cast a critical eye over the various sections available past and present.

Aertel

Aertel, RTE's teletext service, has incorporated a computer section for about a year now. It is hidden away amongst the children's pages on page 429. Initially it was edited by a company called TAD Computers in Wicklow and started off promisingly enough, with weekly updates of full-price and budget computer games, along with the odd review and hint. However, the service gradually dis-improved to the point where it was updated very infrequently and at one stage only contained the charts.

With the dawn of the new year, this service was revitalised in collaboration with the Virgin Games Centre. The page is now updated twice a week. For half of the week it contains just games charts for almost every format under the sun—fifteen pages in fact, ranging from the various consoles to computer games, both budget and full-price. The rest of the week, they transmit a mixture of games reviews coupled with hints and tips. All in all, quite a good service. Let's hope they manage to keep it up.

Teletext UK

The old Oracle service on ITV, which was a victim of the franchise auctions for the various slices of the ITV cake, used to have a healthy computer section; it was updated every day, giving charts on the first page, followed by one or two reviews, normally some news and the odd games hint or two. In the last year or so, it gradually became increasingly games oriented with the magazine being devoted to consoles at the weekends.

Teletext UK, the company which has now taken over from Oracle, has created an expanded service called *Digitiser* on page 350. It covers five pages—a news page, two pages of reviews, a letters page and a page with games cheats and hints—and is a self-confessed games magazine.

When it first appeared, things looked rather bad for Amiga owners. There was no mention of the Amiga whatsoever, and the editor promised console reviews during the week, with PC and arcade reviews at the weekend. Thankfully, this didn't last very long and within a week of the service starting, a humble apology was published, beseeching all Amiga owners for forgiveness and promising that Amiga reviews would start the following week—which they more or less did.

At this stage, the reviews during the week are still very much dominated by the consoles but due to the late decision to support the Amiga, this may well improve in the weeks and months to come. The news page is dominated by the future of gaming, with quite an emphasis on virtual reality and rumours of things to come in the months ahead.

Ceefax

Years ago, the BBC were possibly the only teletext service to have a computer section, which included programs you could receive with your BBC Computer given the proper adapter; many UK schools used this facility. However, this disappeared some years ago and now, with its third overhaul in as many years, Ceefax still seems to be lacking a computer section. That being said, Ceefax is very much dedicated to either news or details specific to the BBC, rather than the features sections you find on other teletext services.

Satellite

Turning our attention to the satellite channels that many people receive via cable, we find that both MTV and Super Channel offer computer magazines. However, due to the fact that the teletext services on both channels are run by the same British company, they are not surprisingly, albeit a little disappointing, practically identical. Pages are duplicated on both services with perhaps only one page being particular to each channel.

Both magazines take four or five pages, including one of computer games reviews, one of console games reviews, a news page which seems to have a very high bias in recent months towards reviews of CD-I software, and also a book review each month. The news page did a review of 1992 followed by a preview of the coming year a few weeks ago, which was quite interesting.

The final page is a list of games charts. The service on MTV normally also has a competition page where you can write in and win some piece of software. The magazine as a whole seems to have perhaps the least games bias of any of the current selection. The service is updated weekly and is to be found on Super Channel on page 250; on MTV, you'll find it on page 220.

The Future?

While the computer magazines on teletext as a whole won't provide you with anything that you won't find in many of the magazines, and can't really hope to provide you with as much information, due to the restrictions of space and the inability to specialise on a particular machine, they do give you another source of information which is ostensibly free. Also, all the magazines dedicate the majority of their space to games which may not quite be to everyone's taste. I know I would certainly prefer a better balance including reviews of productivity items.

This in fact would be my one main criticism of television coverage, whether it be on teletext or programmes: the vast majority of coverage of computers is based solely around games. Maybe this is due to the fact that the producers reckon that the computer users who are most likely to be watching television are games players, or perhaps it is just that such programmes are easier to produce. Alternatively, it could be due to the fact that as you move away from the purely entertainment side of computing, you rapidly become more specialised, thus quickly reducing the potential audience for such programming.

This problem could be overcome with teletext where people need only read the pages in which they are interested. Surely the various teletext operators could devote a few pages a week to more serious computer items, and remove them from the children's areas, where applicable, perhaps even creating a new section? It can't be due to a shortage of news; the existence of the vast array of computer magazines which deal with predominately non-games issues will testify to this.

Overall, I would summarise the teletext services as being yet another source of information about the current state of the computer industry, and unlike the printed magazines, big stories can be broken almost immediately, not needing to wait for a month or two to pass before they can make it into print. If this sort of service appeals to you, and in particular if you are interested in the latest news on games, then I would certainly recommend that you have a look for yourself.

Mixing C and Assembler

by Thomas Rolfs

No doubt there are people in CUGI who have started to program their Amigas using C. It's the language of choice for many reasons, not least the fact that the Amiga's operating system is mainly written in C. However, there will be times when you need to write parts of your code in assembler, usually for speed reasons. The problem is getting C to call your assembler code. How do you do this?

Firstly, you must be familiar with creating C programs using intermediate object files which are linked together to make the final executable program using a tool called a linker. I suggest you refer to your C manual on how to do this. The general idea is that you split your C code into small, easy-to-manage modules. Each module compiles into a corresponding object module, and all of these are then linked together (along with any assembly modules you've written) to produce the final executable.

Let's take a simple example and see how we go about implementing it. Say I have a program called *checksum.c* that I'm working on. It appears in listing 1. The checksum function used here works fine but we want it to run as fast as possible. The fastest (I think) would be the following assembler code:

```
                XDEF     CheckSum

                SECTION Code

*    INPUT:     d1.l = Number of words
*               a0   = start of words to check
*    OUTPUT:    d0.l = Result

CheckSum:
                moveq    #0,d0
                subq.l   #1,d1
                bmi.s    cs_done
cs_next         add.w    (a0)+,d0
                subq.l   #1,d1
                bpl.s    cs_next
cs_done         rts
```

The above code is in a file called *check.a.* To sustitute the C definition of CheckSum for the assembler version, we first remove the C definition from

```
#include <stdlib.h>
#include <stdio.h>
#include <exec/types.h>
#include <libraries/dos.h>

#define MAX_WORDS    100
#define Print(s)     Write(Console, string, strlen(string))

short  wordlist[MAX_WORDS];
char   input[257];
extern struct FileHandle *Open(char *, LONG);
struct FileHandle *Console;
short  CheckSum(short *, long);

void main(void)
{
    long num_words = 0;

    if (Console = Open("CON:CheckSum Test", MODE_NEWFILE)) {
        Print ("Please enter a list of numbers to check\n");
        while (num_words < MAX_WORDS) {
            Read(Console, input, 256);
            if (input[0] == '\n')
                break;
            wordlist[num_words++] = (short)atoi(input);
        }
        sprintf(input, "Checksum = %d\n", CheckSum(wordlist, num_words));
        Print(input);
        Read(Console, input, 256);
        Close(Console);
    }
    exit (0);
}
short CheckSum(short *list, long num_words)
{
    short result = 0;
    while (num_words-- > 0)
        result += *list++;
    return result;
}
```

Listing 1: Simple C code to calculate a checksum

checksum.c and modify line 11 to read:

```
extern short CheckSum(short *,long);
```

The *extern* keyword informs the compiler that the function CheckSum is defined outside of this file. Now we simply compile *checksum.c* to produce *checksum.o* and assemble *check.a* to produce *check.o*. We then link them together to produce an executable.

However, this will not work yet. C has a convention of adding an underscore character to the start of all C functions and variables. This means that the linker will be looking for the reference `_CheckSum()` and not `CheckSum()` when it tries to link *checksum.o* with *check.o*. This means we have to rename CheckSum to _CheckSum in *check.a* and reassemble it.

That done, everything should link together giving us an executable we can run. However, even though we are calling our assembly version of CheckSum() we do have a communication problem with parameters.

Passing Parameters

As our program stands, it will not work correctly. Function parameters in C are passed via the stack. Our CheckSum replacement expects them to already be in registers when it is called. There are three ways around this. One is to pass the parameters as global variables, thereby avoiding using the stack completely. This is the easiest for beginners (simply declare your C variables as `XREF _Label` in your assembly source file), but it's not very flexible.

A second option is to modify the C code so that it passes the parameters in specific 68000 registers. While most modern C compilers allow you to do this, they each do it in a different way, and so we won't try and cover it here—check your manual for details.

The final method is to alter the assembly language function to read the parameters from the stack instead of from registers. This is the most common technique used, and operates in more or less the same way for all Amiga C compilers. Two things often cause confusion with this method: the order in which parameters are pushed onto the stack (most C compilers push the *last* parameter first), and the size of each parameter (a *short* only occupies 2 bytes on the stack, whereas an *int* or *long* will occupy 4 bytes).

Next Time

Unfortunately, that's all I have time for now. Next issue, we'll look at passing parameters between C and Assembler in detail. Until then, try typing in the full C version of *checksum.c* and get it to compile and run.

Then replace the C version of CheckSum() with the following modified assembly version and see if you can find out why it works:

```
                SECTION Code

                XDEF     _CheckSum

_CheckSum:
                link     a6,#0
                movem.l  d1/a0,-(sp)
                moveq    #0,d0
                move.l   8(a6)
                move.l   8+4(a6),d1
                subq.l   #1,d1
                bmi.s    cs_done
cs_next         add.w    (a0)+,d0
                subq.l   #1,d1
                bpl.s    cs_next
cs_done         movem.l  (sp)+,d1/a0
                unlk     a6
                rts
```

The Amiga 1500: Conclusion of a Saga

by Tommy Gibbons

With little time available, the story of the travelling A1500 will come to its resting place.

In the last gripping episode, Commodore were in the process of delivering the latest in visual technology (1990 style) and retrieving the 1984 model. As a footnote, the American nation were able to decide upon the next president, while in the northern part of these shores, a courier company under the pseudonym of 'We lose it before we deliver it' had taken the task of delivering my computer. After all, it had left the warehouse ... hadn't it? "I'll ring you back, it's somewhere in the system." Definitely not in mine, I thought.

Next day. "I can now confirm that it has definitely left the warehouse but the courier company cannot find it in Belfast."

"What the hell is it doing in Belfast?" (More than it's doing in Trim.)

"Don't worry," Commodore said nicely, "we will ship another unit straight away and we'll worry about the missing (link) machine."

A week later, Commodore said: "You haven't got it yet? My God, what is going on?" Not a lot, said I.

Ring-ring. "Hello, Julie from Commodore here, could we collect your faulty machine, maybe next Monday?" Sure. "Okay, bye."

Monday. Dring-dring (doorbell): "Interlink to collect a computer for Commodore."

"Okay, here it is, may I have a receipt?"

"No, this receipt is for the courier company who are actually returning the computer to Commodore; we're only collecting it for them." Must have lost their way, I sarcastically mused.

Another week. "Look, I'm only going to say this once—I haven't got the bl**d*ng thing yet!"

"Hold on; yes, the courier company collected it from our warehouse a week ago, I'll contact them and maybe speed things up a little, okay?"

Next day. "The courier company have it and will put it on the ferry tonight for Belfast." Thoughts were rampant. One question raised it's ugly head: what were they doing with the computer in England for a week? Were they lost? Next question: would they find the ferry on time? Could the ferry, like other shipping in the Irish Sea, come under the attack of a bored Soviet, English or American nuclear submarine crew?

Images of a two-headed fish complete with two hands, seven fingers compiling, rendering, and zapping two headed monsters on my computer on the sea bed filled the innermost corners of my mind. And then there was Belfast—could they get the computer through at the second attempt?

Monday. "Irish ----- ------- couriers, we have a computer for you but you must pay the VAT before we can deliver it."

"No."

"Okay, we will fill out the SAD form."

"Great, when will you deliver?"

"Some time next week."

"WHAT! You must be joking, I've been waiting since last March!"

"Well. that's not our fault."

"If your company hadn't lost the first one..."

"Sorry, we'll get it to you Wednesday at the earliest, ring tomorrow to confirm."

Next day. "Yes, we have it here, but delivery tomorrow at the earliest."

Dring-dring (doorbell again): "Irish ----- --------, I have a computer here for you."

"I'm only after talking to the girl in the office and she said tomorrow at the earliest."

"Ah, don't mind them in the office, they don't have a clue what's going on." Sounds about right.

Sounds of cardboard box being ripped open; yes, computer A1500, right so far; keyboard, joystick and games for children. Okay, stick hard disk into it and get working with Workbench 2.05. Get out Workbench disks... searching box... another look in box... no Workbench disks or manual!

Okay, use Workbench 1.3. Click on icon... no mouse! Search box... search box again... ring Commodore: "Box left out, we will send them on."

On the 28 December in the year of Our Lord 1992, the final part of my A1500 arrived. A period of about nine months. In the 15th century it would have taken about two to three weeks to complete the same journey—so much for modern technology. Workbench 2.05 is very nice, even if it is out of date!

Everything works fine now. The next test is the wondrous A2320 display enhancer from which all these tribulations and mayhem initiated, but it may be some time before the effects of the drugs on which I have become dependent wear off. Then I will understand things like why we need a referendum on abortion every few years, why we need a beef tribunal (and maybe a tribunal to investigate the affairs of the aforementioned tribunal), why Michael Jackson looks like the male white version of Diana Ross, why Cablelink will not pay Sky and so on and so forth...

One last word upon the computer episode. Many thanks, and I mean this sincerely, must go to Sharon at Commodore for the unending patience shown to me. No matter how often I rang with enquiries, courtesy and understanding were given to me at all times. Once again, many thanks Sharon.

Commodities Hints

by Matt Brookes

One of the many excellent new features in Workbench 2.0 is the Commodities Exchange, which provides a common interface to all the myriad screen blankers, mouse accelerators, etc. that most people like to install on their system.

The standard hot-key combination for Commodities is Ctrl-Alt-[X], where X is a character, often the first letter of the name of the program. If they don't already support this concept, set the tooltypes or command line options of your Commodities to this standard layout. Now it's easy to remember how to pop up that commodity at any time!

But what if the commodity is not already running? Well, by running a utility such as *FKey*, or *ToolManager*, which allows you to start programs from hot-keys, it is possible to use the same hot-key combination to both start the commodity, *and* pop open its window.

How? Simple! First assign the same hot-keys in your Hotkey program (*ToolManager* or whatever) as are assigned to the commodity. Next, set the priority of the Hotkey program to be lower than that of all your commodities. The end result? If the commodity is not running, the Hotkey program will start it, but if it is already running, the commodity will pop open its window.

This works because the commodity, having a higher priorty than the Hotkey program, grabs the key combination higher up in the Intuition input chain, preventing the Hotkey program from ever seeing it. If the commodity isn't yet running, then it will filter down to the Hotkey program, which will run the commodity.

Note that if the commodity has a tooltype set for CX_POPUP=NO, and the Hotkey program runs the commodity as a Workbench program, you will have to hit the hotkey combination twice—once to run the commodity, and once to open its window. In general, commodities which are run at boot time should have CX_POPUP set to NO, and those run at a later stage can set it to YES. This can be avoided altogether if the Hotkey program runs the commodities as CLI tools, by using CX_POPUP=YES as a command line option. The side effect is that options set as ToolTypes will be ignored.

If this all sounds rather too complicated, then you'll just have to try it to see how easy it really is. To get you started, here's a simple example, which runs the Commodities Exchange program.

Add the following lines to your *ToolManager.config* file, or modify them to suit whatever Hotkey program you currently run. (And if you aren't running one, you don't know what you're missing!)

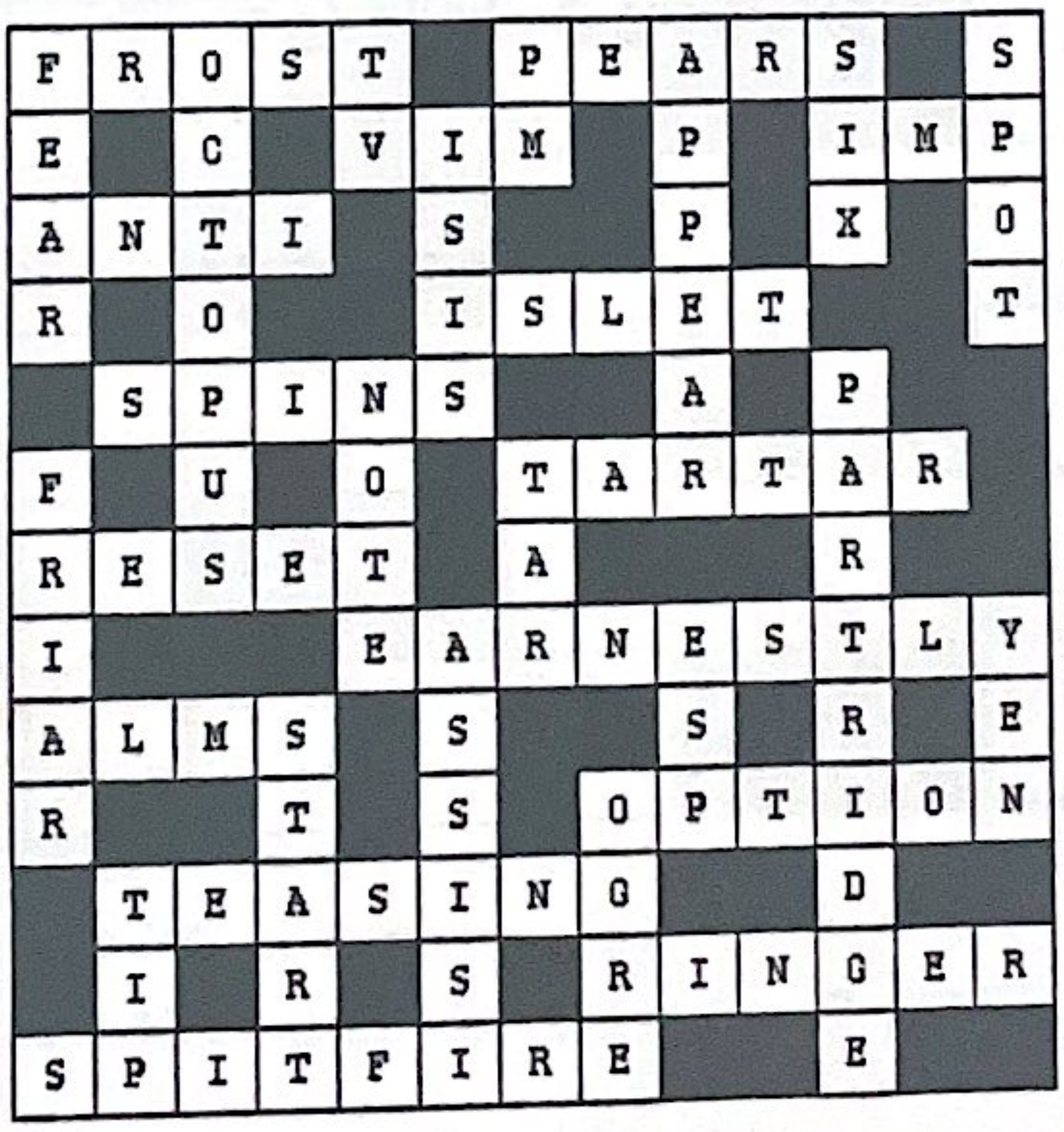
```
WB:
Alias    = Exchange
RealName = Sys:Tools/Commodities/Exchange
Menu     = OFF
Hotkey   = Ctrl Alt Help
#
```

Make sure that Exchange is in the right place, and that it has at least the following ToolTypes set:

```
CX_POPUP = YES
HOTKEY   = Ctrl Alt Help
PRIORITY = 5
```

Hey presto! Hit Ctrl-Alt-Help at any time to bring up Commodities Exchange. More Amiga hints next time. Until then, have fun experimenting.

Solution To CUGI Crossword #6

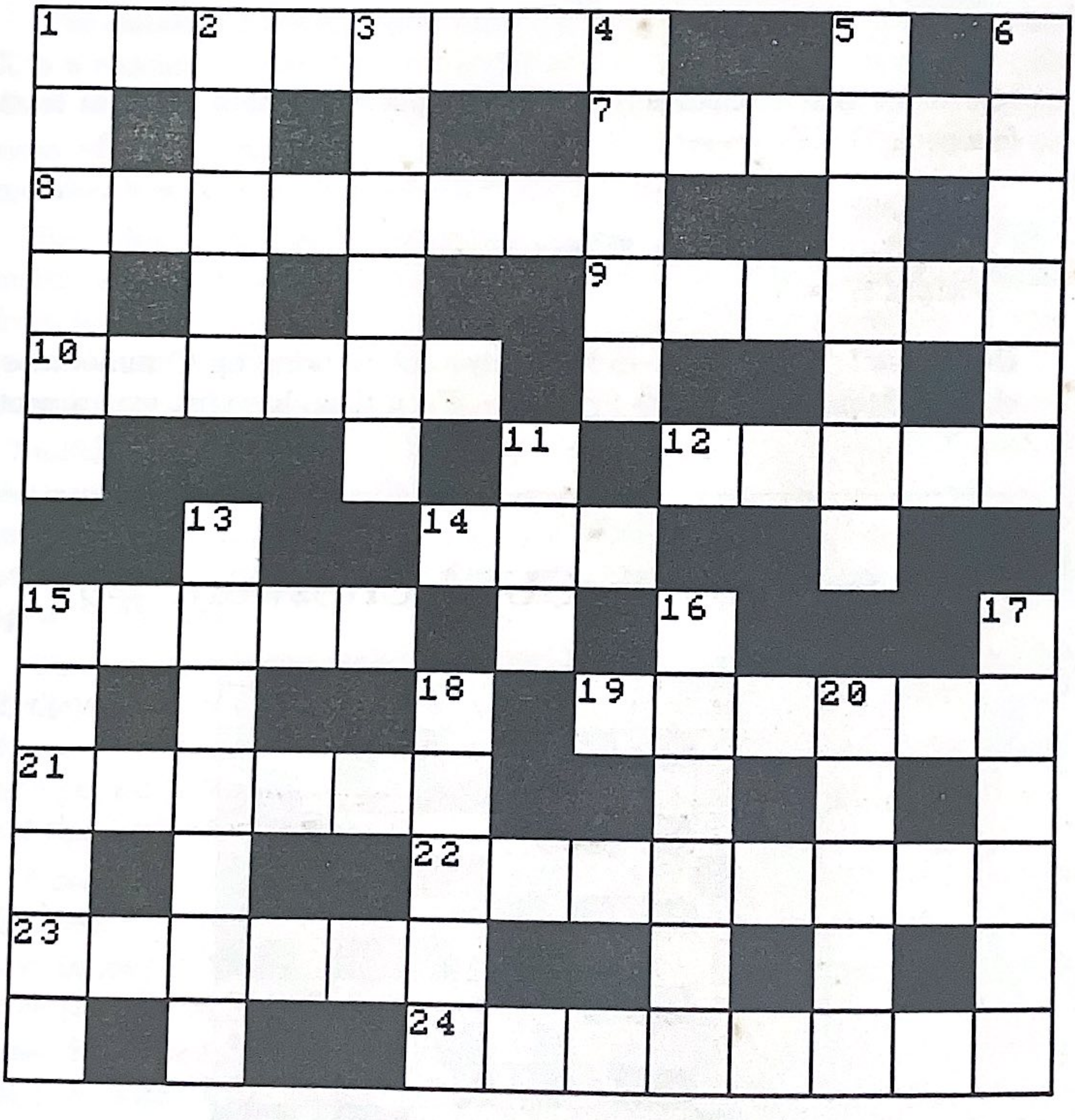


F	R	O	S	T	■	P	E	A	R	S	■	S
E	■	C	■	V	I	M	■	P	■	I	M	P
A	N	T	I	■	S	■	■	P	■	X	■	O
R	■	O	■	■	I	S	L	E	T	■	■	T
■	S	P	I	N	S	■	■	A	■	P	■	■
F	■	U	■	O	■	T	A	R	T	A	R	■
R	E	S	E	T	■	A	■	■	■	R	■	■
I	■	■	■	E	A	R	N	E	S	T	L	Y
A	L	M	S	■	S	■	■	S	■	R	■	E
R	■	■	T	■	S	■	O	P	T	I	O	N
■	T	E	A	S	I	N	G	■	■	D	■	■
■	I	■	R	■	S	■	R	I	N	G	E	R
S	P	I	T	F	I	R	E	■	■	E	■	■

Solution to Aidan's crossword in the October 1992 Newsletter.

CUGI Crossword #7

by Aidan Hollinshead



Across

1. Manufacture of messy coin rate (8)
7. Consented on a great desire (6)
8. Nothing to believe in (8)
9. A confused parent might set a lure (6)
10. Turn to hear the chat (6)
12. Nothing without change is nice in the desert (5)
14. Either metallic rock (3)
15. The gas thinks they've left (5)
19. Spanish national dance (6)
21. Fruity degree for a grandmother (6)
22. The bay circle is surrounding (8)
23. PC Lust makes a bust of himself (6)
24. Somedays we find sled dogs (8)

Down

1. Are you able to go into the telecommunications industry regally? (6)
2. Sounds like you can't choose the anaesthetic (5)
3. Mal cut the powder (6)
4. The sodium thousand were called before the editor (5)
5. Push down and cause sadness (7)
6. A five-hundred decides on having a child (6)
11. It's human (3)
13. Something that has to be done about nude mag (7)
15. What the shrub might say whilst under attack (6)
16. Do without for oneself (6)
17. Pays homage to tree branches (6)
18. A hundred in the lipids are true (5)
20. Could the former land mass be sent away? (5)

Calling Intuition from ARexx

by Colin Dalton

After Eddy's excellent course on ARexx over the summer, a few of you may have been disappointed at ARexx's lack of any Intuition and graphics functions. ARexx, apparently, is a DOS-only, command line affair.

Not true! There are a number of function libraries that allow you to use Intuition functions for opening windows and requesters, using different fonts, file requesters, and generally making your programs look a bit more professional.

Perhaps one of the best of these libraries is *rexxarplib.library*. This was originally designed for ARexx programmers to use the functions of the popular *arp.library*, but has now been extended to cover most of the *intuition.library* functions too. Best of all, it's free! It can be found on the *Amiga World Tech Journal* cover disk for January 1992, available from the club library.

So, how do you use it? Well, first you must inform ARexx that you are using it. This is done by adding the following lines to the top of your program:

```
if ~addlib('rexxarplib.library', 0, -30, 0) then do
  say 'Unable to open rexxarplib.library, check LIBS: directory.'
  exit
end
```

(The ~ character is ARexx's logical NOT operator). Now we are all set up to use its functions. One of the simplest to use is PostMsg(). This pops up a little window with a small message in it, for example:

```
hellostr = 'Hi there!'
Call PostMsg(10, 10, hellostr)
Call Wait(30)
Call PostMsg()
```

10,10 are the coordinates the window is to open at. The window is closed by calling PostMsg() with no arguments.

Another easy function to master is GetFile(). Under AmigaDOS 1.3, this brings up the Arp file requester and allows the user to select a file. Under 2.0 and above, it brings up the standard ASL file requester. Here's an example:

```
filename = GetFile(10, 10, 'RAM:', 'file', 'Select file...',,,, 175, 175,)
say 'You chose' filename
```

As before, 10,10 are the opening coordinates. *RAM:* is the name of the directory that appears in the drawer gadget, and *file* is what will appear in the file gadget of the requester. 'Select file...' is the hailing string (which appears in the drag bar of the requester). The series of commas are there because I'm leaving out certain arguments and accepting the defaults. Finally, 175,175 are the X and Y dimensions of the requester.

Here's a more complicated example, taken from my BASIC interpreter, which demonstrates some of the other parameters you can use. See if you can work out what it does! (In this and following examples, -> at the end of a line is used as a continuation symbol to indicate that the following line should be typed as part of this line.)

```
filename = GetFile(10, 10, 'RAM:', 'basic',                                ->
            "Select file to interperet",, PATGAD,, 175, 175, "#?.bas")
```

It is sometimes necessary to ask the user a question that requires a Yes/No answer or something more complicated. The Request() function can fill both these roles. Yet another example:

```
ertext = "Warning! An error has occurred!\                                 ->
           Type: "errortext"\Line: "current_line "\"
ertext = ertext || "You may edit the line, or quit.\"
reqans = Request(35, 35, ertext, line.current_line, 'Continue', 'Quit')
```

This example puts up a requester with a message from the program (*ertext*), and a string gadget containing text (from the *line.current_line* variable, and two options, 'Continue', and 'Quit'. Guess what 35,35 is!

Note the backslashes in the *ertext* variable—these are newline characters. You can now test the value of *reqans* to see what the user did: if she clicked 'Quit', then *reqans* will be empty, else it will be equal to whatever was in the string gadget.

All this stuff is pretty good, but it's not *proper* windows. To set up a real Intuition window requires a lot more work. Firstly, you have to understand the concept of messages and ports. When a user clicks on a window's close gadget, or a gadget within the window, Intuition sends a message to the controlling program, telling it what happened.

With ARexx, the same is true. You must first set up a message port to receive the messages that Intuition sends you. This is done as follows:

```
address ARexx "'x = CreateHost(Controller, ListenerPort)'"
port = OpenPort(ListenerPort)
```

The address ARexx is necessary because the host (what controls the message port) has to be set up to run asynchronously (separate to the main program). CreateHost() takes two arguments: the name of the host (*Controller* in this case) and the name of the message port the host is to listen to (*ListenerPort* in our example). The second line actually opens the port which will be listened to by *Controller*, the host we have just set up.

Now we want to tell Intuition what messages we want to be sent. These are called IDCMP flags, of which there are many (see the ROM Kernel Manuals). For our little example, we don't need to know much, so the following line will suffice:

```
idcmp = 'CLOSEWINDOW+GADGETUP'
```

This says that we want to be told when the user has clicked on a gadget and released it, and when she clicks the close window gadget. Next we have to tell Intuition what we want our window to look like, and what gadgets we want it to provide:

```
flags = 'WINDOWCLOSE+WINDOWDRAG+WINDOWDEPTH+ACTIVATE'
```

This will provide us with a close gadget, a depth gadget and a window that is draggable. It will also activate the window when it is opened. Now that we have all the setup done, we can open the window with the following line:

```
Call OpenWindow(Controller, 10, 10, 590, 162, idcmp, flags)
```

Notice the *Controller* argument. This is the host that we set up earlier to listen to what the window is telling us (actually what Intuition is telling us). 10,10 are (surprise) the opening coordinates and 590,162 are the X and Y dimensions of the window.

Great, we have a window—but an empty window isn't much use! How about some text? Well, *rexxarplib* provides for this in the WindowText() function. However, this isn't very flexible, so we will use a combination of the Text() and Move() functions. They are both self-explanatory.

```
Call Move(Controller, 25, 25)
Call Text(Controller, 'Hi there!')
```

Note that we have to keep on refering to our host, Controller. This can be a bit annoying, but there is flexibility in that you can have more than one window open at a time. (In case you were wondering, the above two lines move the current drawing position to the coordinates 25,25 (relative to the top left corner of the window) and print 'Hi there!').

Text is boring; how about a gadget? No problem! We use AddGadget. This is a fairly complicated function that requires many arguments. Here's an example that will create a gadget at 50,50 with the word 'Load...' on it:

```
Call AddGadget(Controller, 50, 50, 'LOAD', 'Load...', '%1 %d')
```

The first three arguments are straightforward enough. The LOAD is our internal name for the gadget (see later), and 'Load...' is what appears on the gadget itself. The final argument looks a bit daunting: it's simply the message that is sent to our message port when the gadget is clicked on. %l stands for the type of action (e.g. GADGETUP) and %d stands for the name of the gadget (LOAD). So, when the user clicks on the gadget, the message 'GADGETDOWN LOAD' is sent to our port, and when she lets go of the mousebutton, 'GADGETUP LOAD' is sent.

That's all very well and good, but how do we receive and act upon these messages? The simplest way is to create a routine that sits and waits for the messages to come in. For example, look at listing 1 on the next page (line numbers are for reference only):

Here's how it works. Line 1 starts off our loop. Next, line 2 waits for a message to arrive at ListenerPort. When a message arrives, line 3 begins a loop (which we call *lop* for convenience) to process this message, plus any additional ones that may arrive afterwards.

Line 4 retrieves the message, and line 5 exits the loop if the message turned out to be nothing. Line 6 extracts the message contents, allowing them to be examined by the code which follows. Line 7 checks to see if the message was from the CLOSEWINDOW gadget, and if it was, tidies up in preparation for exiting.

Line 8 splits the message into two parts. Remember, we told the window to send messages in the form of '%l %d', i.e. the gadget name and the message type. All we're doing is retrieving each part into the variables *part1* and *part2*.

Line 9 checks for a GADGETUP message, which occurs when the user clicks a gadget and releases the mousebutton while still over the gadget, thus indicating that she wants to select it. If true, we can proceed to the following lines to check which gadget was selected.

Line 10 checks if the LOAD gadget was selected. If it was, line 11 calls the file requester to allow a filename to be selected. Line 12 opens

```
 1 do forever
 2   t = WaitPkt(ListenerPort)
 3   do lop = 1
 4     p = GetPkt(ListenerPort)
 5     if c2d(p) = 0 then leave lop
 6     command = getarg(p)
 7     if command = "CLOSEWINDOW" then Call TidyUp()
 8     parse var command part1 " " part2
 9     if part1 ~= "GADGETUP" then do
10       if part2 = "LOAD" then do
11         file = GetFile(10, 10, 'RAM:', 'text',                          ->
                  "Select a small text file to display",,,, 175, 175,)
12         Call Open(fh, file, 'R')
13         Call Move(Controller, 10, 10)
14         line = ''
15         do while ~EOF(fh)
16           line = line || ReadLn(fh)
17           end
18         Call Text(Controller, line)
19         Call Close(fh)
20         end
21       end
22     end
23   end
```

Listing 1: A simple ARexx message handling loop

the selected file (*fh* is our internal name for it). Next, line 13 moves the current drawing position to the top left corner of the window (allowing for the window borders), and lines 14–17 read in the specified file and append all the lines to the variable *line*. Finally, line 18 outputs this variable to the window, and line 19 closes the file. The remaining lines terminate the various loops, causing ARexx to go back to the start and wait for the user to choose another option.

Now I'm not suggesting that this is the ideal way to write a *More* utility, it just illustrates a few basic points on how to deal with messages and how to open a file and read it. Our little program isn't finished yet; there's still the TidyUp() routine to do:

```
Call CloseWindow(Controller)
exit
```

That wasn't too hard, was it? I have only scratched the surface of what *rexxarplib.library* has to offer—you can, for instance, load IFF pictures with it, and much, much more. I have many little programs written which demonstrate the use of the library and general programming in ARexx, including a BASIC interpreter (!) and an Intuition interface for *XPlayer*. The latter also demonstrates controlling ARexx-compatible programs. If anyone wants a copy, just ask me. I can be found at CUGI meetings and on CUGI's BBS.

I think I'll write a *MultiView*-like program for viewing text files and IFF pictures someday soon, just to show it can be done!

Classified Ads

Amiga Colour Video Digitizer

Rombo's Complete Colour Solution, grabs colour video from VCR or Camera. Great quality and an even better price of £90 o.n.o. Sterling RRP £99.95.

Amiga Genlock

The Rocgen+ Genlock for all Amiga models (except the A1200/4000). Great quality and ideal for home movies etc. Will sell for £120 o.n.o., only one month old. (Selling because it doesn't work on my A1200.)

For either of the above items, call Gavin on 280 3996 or leave mail to Gavin Mc Connon on CUGI's BBS.

9600 bps V32 Modem

Highspeed Datacode Lima 5032 V32 modem, fully Hayes compatible and approved for use on the Irish phone system. Features full built-in menu system to make configuration a doddle, plus a comprehensive programming language. Up to 10 built-in scripts, automated operation, etc. Works with all Irish bulletin boards. £250 o.n.o.

Call Eddy Carroll on 287 4566 after 7 February (or leave private email on Infomatique or CUGI BBS).

Wanted: Home for old PETs

House-trained, reliable, 32K RAM, network boards available. Any offers? Contact Geoff on 288 3863.

CDPD II

by Geoffrey J. Reeves

CUGI's latest software acquisition is the follow-up to the CDPD CD-ROM from Almathera Systems. Boasting 527 megabytes of data, it should take one's breath away. If I'm breathless at the end of this review, draw your own conclusions.

The usual Workbench directories/icons are there (*System*, *Monitors*, *Tools*, etc.) but it's the others you want to know about:

- Parnet_On
- PARNET
- Fish
- JAM
- GTS
- Scope
- AB20
- Mousetrap
- Fractal
- Aquarium
- Fishrod
- DirWork

Parnet_On

Just sets the Parnet system—this allows one Amiga to access the other Amiga's disks and peripherals. You can access an Amiga 500 with the CDTV adapter as NET:CDTV and access its files as NET:CDTV/FISH/... (This is in fact the method CUGI-BBS uses to access the Fish CD-ROM.)

PARNET

Files describing the system and how to set up the cable joining the parallel ports of the two Amigas.

Fish

Now CUGI can boast its 760 Fish disk collection. Yes, I know that number 800 has been spotted (I'd have preferred striped, myself). Much of the material is specifically aimed at Workbench 2.0+ users but most of us are that way inclined, aren't we?

JAM

Just Amiga Monthly (Britain's most Black and White magazine) is a well-respected journal and the disks it provides (separate from the mag) are low in quantity but high in quality. Printer drivers are a popular item but a C compiler and various utilities are also present. Only 10 disks but some religions are based on that number of commands...

GTS

Just an advertisement for George Thomp... never did like ads.

Scope

Another 220 disks for your delight. I didn't check through them all but I found articles, animations, and fonts a-plenty so I reckon there'll be something there for everyone. I found a program which claims to speed up printing files on a HP DeskJet. It then owns up to compressing the data and is aimed primarily at graphic dumps—must try it out with *DPaint*. An *Aquarium*-based catalogue and program is provided to help you track down the items you are interested in.

AB20

We did buy an archive of this before but found out that the CDTV's capability with the ISO-9600 standard is not all it's cracked up to be. I could go on for pages describing this lot. Suffice it to say that the arced material is subdivided into the following sections:

- Applications
- Fish
- Sounds
- Archivers
- DataComm
- Demos
- Networking
- Games
- Graphics
- Hardware
- Languages
- Sounds
- TEX
- Text
- UseNet
- Utilities

The unarced *Games* directory contains just *Amines* (as in *Windows*), *Drip* (as in chairman—not!) and *Megaball* (as in ...). The unarced *Graphics* directory contains no less than 16 sub-directories! By the way, the next meeting is on 22 January :-)

Mousetrap

Ah... interesting; my mouse isn't doing what it ought... maybe I should RTFD. Hmmm... IF controller? Aarrgghh! (It's a CDTV utility that lets you control the CDTV from a remote Amiga's keyboard so that you can get by without a separate keyboard for the CDTV.)

Fractal

This is just a demo of some of the fractal images to be found on the *Fractal Universe* CD-ROM produced by Almathera Systems. My only gripe is that it's the same demo as that on CDPD 1.

Aquarium

The usual program/database giving you access to all the Fish disks. Each disk has been summarised and by selecting categories you can find programs which might be of interest to you. Use it at the next CUGI meeting!

Fishrod

A simple (but effective) utility which gives a list of all the disks available on the CD and 5 (okay 6 including the *Close Window*!) gadgets (DF0: DF1: DF2: DF3: and FORMAT). Select a Fish, SCOPE or AB20 disk and a floppy to copy it on to and hey presto! CUGI's Amiga Librarian never had it so easy!

DirWork

I admit I've slagged off utilities like this in the past but with more partitions than I can handle easily, I see how useful they can be. *DirWork* is a directory handler—you know, vertical split screen, you choose a device (AmigaDOS or logical or a directory) on the left and another on the right and you can delete file, directories, copy files across, create icons, directories, etc. It copes with interlace screens, it's got user definable gadgets—I like it and recommend it heartily.

Where Can I Get $760 - 660 + 10 + 220 + \ldots$ Disks?

There is a huge amount of stuff available now—CUGI broke the gigabyte barrier (did your disk drives pop?) ages ago. Don't be shy; if you want a utility, the chances are that we have it. No more should you have to suffer the indignity of people saying things like, "What? Version 0.3 of *DMouse*—snigger, snigger." You do know what *DMouse* is, of course... don't you? ;-)

The Secret Behind Everyone's Disk Problems

by Daniel J. Barrett

In case you missed the July '92 newsletter, Dan Barrett (Internet address `barrett@cs.umass.edu`*) is the moderator of Usenet's Amiga Reviews newsgroup, and a regular contributer to* `comp.sys.amiga.advocacy`*, well-known for his BLAZEMONGER parodies. In the wake of a recent (typically pointless) discussion about whether CrossDOS should display one disk icon or two when a disk is inserted, he put his latent play-writing talents to work and has kindly given us permission to reprint the result. Note that while the article is © Daniel J. Barrett and may not be included in any publication without Dan's consent, it may be freely distributed without modification.*

For non-Usenet readers, here's a quick introduction to some of the regular network personalities. Marc Barrett (no relation to Dan) is well-known for his constant (and very occasionally constructive) criticism of the Amiga. Evan Torrie is a knowledgeable Mac advocate. Dave Haynie, Mike Sinz, Ross Hippley, Sue West, Carolyn Scheppner, Dr Peter Kittel, Peter Cherna, and Andy Finkel are all current or recent employees of Commodore. Paul Prescod is a vocal IBM advocate. Of course, any resemblance between these good people and the characters in the following text is purely coincidental. :-) *Now, over to Dan...—Ed.*

Have you noticed that a significant number of postings this week have been about disk-related 'problems?' Well, in honor of these wonderful people who cannot seem to deal with disk drives and real life simultaneously, I hereby present a short play, entitled...

The Case of the Detonating Disk Heads

A Play in 6 Scenes

by Flop E. Format

SCENE 1

It is night. Marc Backintosh is up late, working on his Amiga 3000 which he has borrowed from his mom. The telephone rings.

MB: [Picks up telephone] Hello world?

EvanT: Hi Marc, this is Evan Toenail. How's it going?

MB: TERRIBLE.

EvanT: Why? What's wrong?

MB: This computer SUCKS.

EvanT: So why do you use it, then?

[There is total silence on the phone]

EvanT: Oh, never mind. Anyway, I just had this cool idea for a Mac Desk Accessory...

MB: WAIT!!!

EvanT: Marc! What is it?!?

MB: Oh my God... I don't believe it! It's... AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGGGGGGGGGGGGGGGGGGGGGGGHHHHHHHHHHHHHHHHHH!!!

[An explosion is heard. The telephone line goes dead.]

EvanT: Marc? MARC???

SCENE 2

Morning at the Backintosh house. The computer police are here. Detective Sergeant Officer Dave HayIsForHorses is studying the gruesome scene, together with Inspector General Mike SIMMS.

DaveH: Bizarre. This whole thing is totally bizarre.

MikeS: What is it, Dave?

DaveH: I've never seen anything like it before. I mean, look at that Amiga over there. [They both look.] The VSM is totally frobbed. It looks like the 'Data Ready' handshaking didn't sweep the prescalar timer before the variable width pulse triggered a DSKSYNC flush, but the jumpered word boundary...

MikeS: ENGLISH, Dave, please!!

DaveH: Oh, sorry Mike. Look at the monitor. What do you see?

MikeS: Um... Workbench.

DaveH: That's right. Notice anything special?

MikeS: Hmm... let's see... the Preferences drawer is open. ScreenMode is running. Hmm... I see he tried to set the display resolution to 1280 × 1024 noninterlaced...

DaveH: Keep looking...

MikeS: I see a bunch of disk icons... WB_2.x, Work, PC0, ... hey! He's running *CrossDOS*!

DaveH: Good work, SIMMS!

MikeS: Thanks, Dave!

DaveH: Now... what do you make of all the blood and guts that are splattered all over the room?

MikeS: It can mean only one thing, Dave. [Ominous music begins to play.] Marc, while running *CrossDOS*, must have put a disk into the internal drive, seen TWO icons appear instead of one, and...

DaveH: And...?

MikeS: His brain exploded. He simply couldn't take it.

DaveH: Holy HBSTRT registers, SIMMS! You're right! Do you think it was an accident?

MikeS: We can't rule out foul play yet. We don't know whether Marc ran *CrossDOS* of his own free will. We'd better investigate further.

DaveH: I agree. Did Marc have any enemies? Anyone who would want to do him harm?

MikeS: I doubt it. He was a well-respected authority in the USENET community.

Voice: Hello in there?

DaveH: [To Mike] Better go and see who that is. Be careful.

SCENE 3

Mike SIMMS sees Evan Toenail walk into the Backintosh house.

EvanT: [Entering] Hi, I'm Evan Toenail. I was on the phone with Marc when... well... what happened?

MikeS: We're not sure yet. Marc was using his Amiga when...

EvanT: [Looking at the Amiga.] Ugh!! Is that thing running *CrossDOS*?

MikeS: Don't be a smartass.

EvanT: Hey, chill out.

MikeS: You know something about Amigas?

EvanT: Sure! I'm an expert on this stuff. Watch this!! [He removes a 3.5″ disk from his pocket and inserts it into the internal drive.]

MikeS: [Waiting] Well?

EvanT: I don't understand it! I stuck a Mac disk into the drive!

MikeS: And...?

EvanT: [Still waiting] Weird!! A dialog box, um, I mean 'requester' is supposed to pop up and ask me if I want to format the disk!

MikeS: Do you WANT to format the disk?

EvanT: No, of course not!

MikeS: Then what are you talking about?

EvanT: Where's the dialog box? It's SUPPOSED to pop up a cute little message! It's SUPPOSED TO!!!! Waaaaahh!! [He breaks into tears]

MikeS: Hey... kid... don't get emotional. This is an AMIGA. It doesn't do that. It formats disks only when you run the *Format* program.

EvanT: [Between sobs] Huh? It does? IT DOES???? OH NO!!!! AAAAAAAAAAAAAAAAAAAAAAAAAAAAAARRRRRRRRRRRRGGGGGGGGGGGHHHHHHHHH!!!!!!!!

[There is a massive explosion.]

DaveH: [Rushing into the room] Oh, SPRxDATA!! Not again!!! [He drags Mike SIMMS's unconscious body from the room. Evan is nowhere to be seen, and there is a lot more blood and guts on the walls.]

SCENE 4

Mid-afternoon at CBM headquarters. Dave HayIsForHorses is having a cup of coffee with Ross HipHopRapper.

DaveH: What do you think of all these explosions, Ross?

RossH: [Singing to an intense drumbeat mod downloaded from wuarchive]

Dave, I think
There's a really big stink:
It's a mystery, through and through.
Instead of codin',
Everyone's explodin'
I can't tell ya what to do!

I'm just the Manual Man,
And I do what I can
To document the system.
But the criminals, hey,
They got away.
You tried hard, but you missed 'em!

Boom-shagga, boom-shagga, boom-shagga, boom-shagga, . . .

DaveH: Thanks, Ross. Thanks a shitload.

RossH: No sweat, Dave.

[Ross HipHopRapper leaves, making strange vocal noises. Mike SIMMS hobbles in on crutches, accompanied by Sue Wetsuit and Peter KittyKat.]

DaveH: How are you feeling, Mike?

MikeS: Like I just had a Mac weenie's brain explode in my face. Yecch.

SueW: Mike's been telling us all about the case, Dave. Do you think it would help if I post something to `comp.sys.amiga.announce`?

DaveH: Um. . .

SueW: Come on, Dave! I can see the press release now: "FOR IMMEDIATE RELEASE: AMIGANS AGHAST AT EXPLOSIVE ENIGMA!"

PeterK: Sue, why *do* those press releases always start with "FOR IMMEDIATE RELEASE"? What the heck does it mean, anyway??

SueW: Huh? I don't know, Peter. I figured that if I didn't write it, then the Net connection would slow down. Or something like that. . .

PeterK: Makes sense to me!

DaveH: People, people, we've got to pay attention to the real issues here and not get sidetracked. Now, the first thing we need to do is. . .

[The telephone rings]

PeterK: [Picking up phone] Hello?

Voice: You'll never take me alive, coppers!

PeterK: Er, um. . . Dave, some guy wants to talk hardware. Copper lists or something.

DaveH: [Grabs phone] Yo! HayIsForHorses here!

Voice: If you were a real computer company, you'd have solved the case already.

DaveH: What? Who is this??

Voice: If you want to find out what really happened, come to the abandoned computer factory at 4000 Amber Street at midnight tonight.

[There is a click—the caller has hung up. Dave describes the call to the other people in the room.]

PeterK: Don't do it, Dave! It's a trap!

SueW: No, it's an interrupt!

DaveH: No, it's my duty to check this out.

PeterK: At least take someone else with you! Mike is still hurt! How about Peter ChurnYourStomach? Andy Fickle? Carolyn Schell-Programmer?

DaveH: No thanks, folks... I think Mike and I have to do this alone. Come on, partner.

[Mike stumbles out the door after Dave.]

SCENE 5

Midnight at an abandoned computer factory on Amber Street.

MikeS: I don't see anything yet, Dave. Do you think this was all a joke?

DaveH: No I don't, Mike. Whoever the guy is, he sounded completely serious on the phone. In fact, I'd go so far as to say he has absolutely no sense of humor.

MikeS: Well, THAT narrows down the list of suspects!

DaveH: Shhh... I hear something. OOHH!! [thud] [Dave collapses.]

MikeS: Dave, what happened? Are you OOOOHH!! [thud] [Mike falls to the floor unconscious.]

[Blackness. More blackness. Inky, opaque blackness with no end. And then... light.]

DaveH: Ohhh... my poor head. I feel like Fat Agnus sat on me.

MikeS: Groan... what happened? Hey, why am I all tied up? Hey Dave, so are you!!!

[A voice speaks from the darkness.]

Voice: I see that you are both finally awake. It sure took you long enough.

DaveH: Who are you, you villain? You hurt us!

Voice: The reason you can't solve this case is due to your inability to build a reasonably priced computer. And don't expect that your injuries are going to invoke sympathy, or awe.

MikeS: Wait a minute... I know those words...

Voice: Furthermore, you don't understand what real applications are. This explains why requesters and multitasking floppies turn you on.

DaveH: Hey... I think I am starting to figure this out...

Voice: Well, if you are a real luddite, I'm sure this is impressive to you.

MikeS: Oh my gosh! It's... it's... [The music suddenly builds to a climax]

DaveH: Paul PressReturn!!! Of course!!

PaulP: Yes, well, you figured it out. Anybody could have done it. Do you think I didn't have to do this same kind of shit for years? I used a PC before hard drives were anywhere near affordable.

MikeS: You're right, Dave! There is no mistaking that 'factual' condescending tone of voice. OK, PressReturn, what's the game here?

PaulP: The game, as you so ignorantly put it, is the end of Commodore. I have easily trapped two of its most prominent programmers.

DaveH: Hey, I'm not a programmer; I'm a hardware guy.

PaulP: Same thing. You still don't impress me. In any case, your time is up. I have set up that Amiga over there [points to the wall, where an Amiga is connected to a strange-looking peripheral] to explode the moment that its disk fills up.

MikeS: You vile fiend!!

PaulP: Right now, it's connected to `amiga.physik.unizh.ch`, downloading every single version of Roger Uzun's *UChess*.

DaveH: We're doomed! That will fill the whole disk easily!

PaulP: Of course, if you had OS/2, you could cache it. But enough of this. I leave both of you to your fate. Soon, all of your fellow

Commodore idiots will join you in death. [He exits, not laughing at all.]

DaveH: Mike, I think this is the end!

MikeS: I think you're right, Dave... but wait! I have an idea! Drag me over to that Amiga if you can.

[Dave, in a truly Herculean effort, lassos Mike with the mouse cable. He then uses the mouse to drag & drop Mike at the console.]

DaveH: Whew!!

MikeS: Now let's see how much disk space is left. [Using his tongue, he clicks the screen depth gadget, activates a Shell window, and types 'I... N... F... O... <Return>'.]

Amiga:

```
Mounted disks:
Unit       Size    Used     Free Full Errs  Status     Name
RAM:        16M   16384        0 100%    0  Read/Write Ram Disk
WB-2.x:   6194K   12388        0 100%    0  Read/Write System2.0
DH1:       100M  206734        0 100%    0  Read/Write Work
DF0:       837K    1683       75  96%    0  Read/Write Empty
PC0:       Unreadable disk
```

DaveH: Oh my gosh, Mike... everything's full except for the floppy, and there's only a few KB's left!!!!

MikeS: [Flipping back to the terminal emulator] The last version of *UChess* is almost downloaded!!! Oh no!!! We're out of time!!!

DaveH: Well, old friend, I guess this is it. We're doomed, just like you-know-who always said. But hey... it's been great working with you, SIMMS. Even though you're just a programmer.

MikeS: Thanks a lot, you hardware geek!

[The seconds tick by, as the disk usage reaches 97%... 98%... 99%... And then...]

Amiga: `Volume DF0: is full. (Retry) (Cancel)`

MikeS: Yeeeeeeeee... HAH!! Gimme that mouse!! [He opens up a new shell, types '`Delete df0:UChess1732.lha`', and then clicks on 'Retry']

Amiga: `Download finished successfully.`

DaveH: WaaaaHOOOOOO!!! You did it, Mike!! Only on Amiga!!

MikeS: I *knew* those non-preemptive requesters would come in handy someday!! Now help me get these ropes off!! We've got a criminal to catch!

SCENE 6

Commodore Headquarters again, the next day. Dave H, Mike S, Sue W, Peter K, Peter C, Carolyn S, Ross H, Andy F, and lots of other wonderful Commodore folks whom I have forgotten to mention are all sitting down and watching TV.

TV: "... as the firefighters battle the massive blaze. Its origin is unknown, but witnesses claim that it was started when an unidentified man's brain exploded. And now, in other news, Irving G..." [Mike SIMMS turns off the TV.]

MikeS: Well, Dave, I guess we know what happened to Paul PressReturn now!

DaveH: Yup! He obviously couldn't live with the idea that a multitasking requester is a useful thing. He exploded too.

PeterK: How is this all connected to the other deaths?

DaveH: We'll never be sure, but it's likely that PressReturn installed *CrossDOS* on Marc Backintosh's Amiga.

SueW: And I suppose Evan Toenail's explosion was related too?

MikeS: Yeah. We have learned that an anonymous person handed him that fatal Mac disk on his way to Marc's house.

PeterC: Well, I'm glad it's all over. And I even got a line in this stupid play.

CarolS: So did I!

AndyF: I didn't!

SueW: I think I'll write up the whole case as another press release for `comp.sys.amiga.announce`! "FOR IMMEDIATE RELEASE: COMMODORE COPS CONQUER COMBUSTIBLE CRIMINAL! " How's that?

PeterC: Sounds great, Sue! Hey! I got to say another line!

MikeS: Well, Dave, even though it's over now, I still can't believe it happened. I mean, they EXPLODED!! That's wild!

DaveH: Yes, Mike. These people were so closed-minded that when the Amiga did something they didn't approve of, they could not handle it. So their brains exploded.

MikeS: Luckily, that could never happen to us!! I mean, we built the Amiga! It always does what we want it to do!

DaveH: You are sure right about that, Mike!

[The telephone rings. Dave answers it.]

DaveH: Hello?

Voice: [A young, European voice] Hey, you wimpy OS people! Guess what I did?? I just disassembled all of the AGA chips and posted the code on the Net, fully documented!! Now EVERYBODY can bang on the new chipset hardware directly!! How do you like THAT?? Ha!!

All: AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGGGGGGGGGGGGGGGGHHHHHHHHHHHHHHHHHHHHH!!!!!!!!!!

[There is a loud explosion. Commodore Headquarters goes up in flames.]

THE END

DISCLAIMER: The characters in this play are all fictitious. Any resemblance to actual USENET people, living or dead, whole or exploded, hardware-banging or OS-coding, is completely coincidental.

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